Section D
Spent Nuclear Fuel

PROJECT MANAGERS
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SUMMARY

The Spent Nuclear Fuel (SNF) mission consists of the Spent Nuclear Fuel Project (SNFP) WBS 1.3.1.1 (Project Baseline Summary [PBS] WM01) and the subsequent Canister Storage Building (CSB) Operations Project WBS 1.3.2.1 (PBS WM02), which does not start until FY 2005.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of June 30, 2001. All other information is as of July 25, 2001, unless otherwise noted.

Fiscal year-to-date milestone performance (EA, HQ, and RL) showed that three out of four milestones (75 percent) were completed late and one milestone is overdue.

The Milestone Achievement details, found following the cost and schedule variance analysis, provide further information on all milestone types.

NOTABLE ACCOMPLISHMENTS

Fuel Movement Activities — Sixteen Multi-Canister Overpacks (MCOs) (332 canisters – 4608 fuel assemblies) have been removed from K West (KW) Basin for a total of 74.85 Metric Tons of Heavy Metal (MTHM) shipped. The fifteenth MCO was shipped to the Canister Storage Building (CSB) on July 3, 2001. The sixteenth MCO was shipped to the Cold Vacuum Drying (CVD) Facility on July 9, 2001. After being processed at the CVD Facility, it was then shipped to the CSB on July 12, 2001. The second maintenance outage was completed on schedule for K West Basin. All new equipment for supporting and operating the manual process tables has been installed and tested. The new equipment is expected to be fully operational by August 1, 2001. An additional reduction in average processing time of up to 30 percent is anticipated when the new equipment is fully operational.

K Basins Construction Projects — Activities conducted during this report period include: initiated 30 percent design review of Fuel Transfer System (FTS) Cask, submitted the FTS Functional Design Criteria (FDC) for review and approval, submitted KE FTS Notice of Construction (NOC) to RL, Canister Cleaning System (CCS) construction initiated on mechanical, electrical and structural packages, Construction initiated the conceptual design of the Sludge Water System (SWS), issued contracts for the FTS Cask and Cask Transportation System for CSB Production Improvements to PacTec.

Site-Wide SNF Integration Activities — The first production Shippingport Spent Fuel Canister (SSFC) was placed into a cask and shipped to T Plant for dry runs and Operational Readiness Review (ORR) Demonstrations. The second and third SSFCs were received at the Hanford Site. The Baseline Design Criteria Document for the Sludge Handling Project was revised and the Preliminary Design was initiated.

SAFETY

The Spent Nuclear Fuel (SNF) Project has achieved over three million safe work hours. No Lost Away Workday Cases have been reported in twenty-two months. In addition to the three million safe hours reached at the end of June, during both May and June there was a reduction in the number of first aid cases reported.

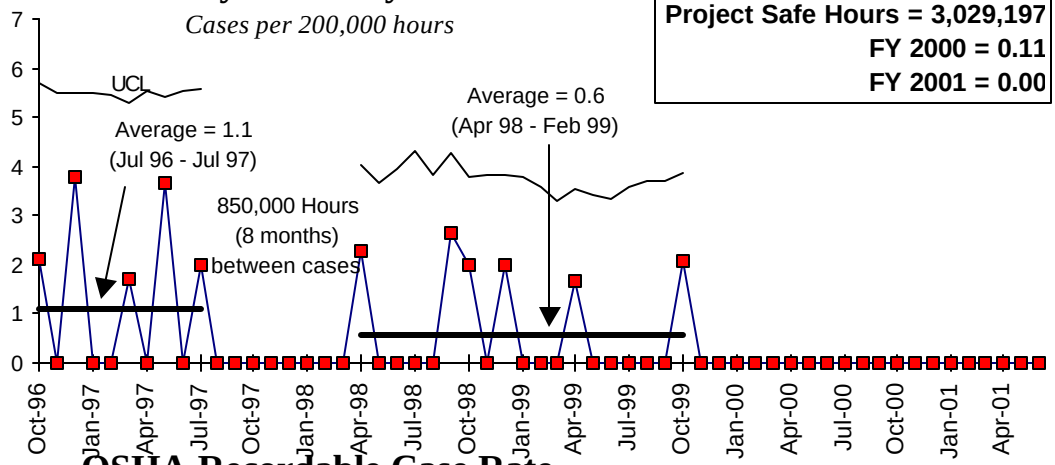
SAFETY (CONTINUED)

Lost Away Workday Case Rate

Green

Cases per 200,000 hours

Project Safe Hours = 3,029,197
FY 2000 = 0.11
FY 2001 = 0.00

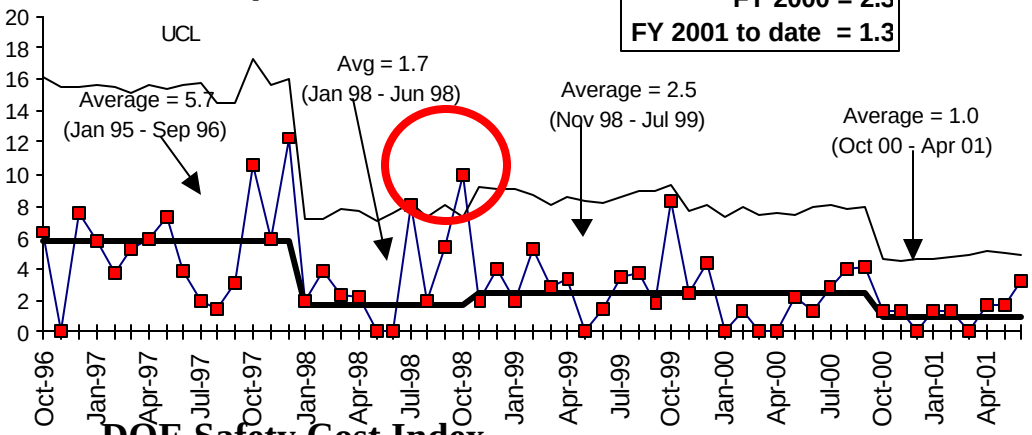


OSHA Recordable Case Rate

Green

Cases per 200,000 hours

FY 2000 = 2.3
FY 2001 to date = 1.3

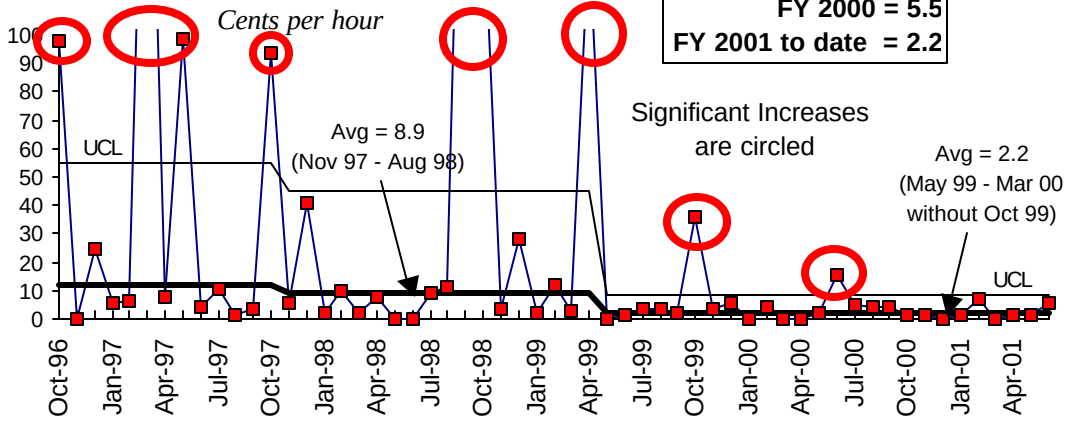


DOE Safety Cost Index

Green

Cents per hour

FY 2000 = 5.5
FY 2001 to date = 2.2



Month of Injury/Illness

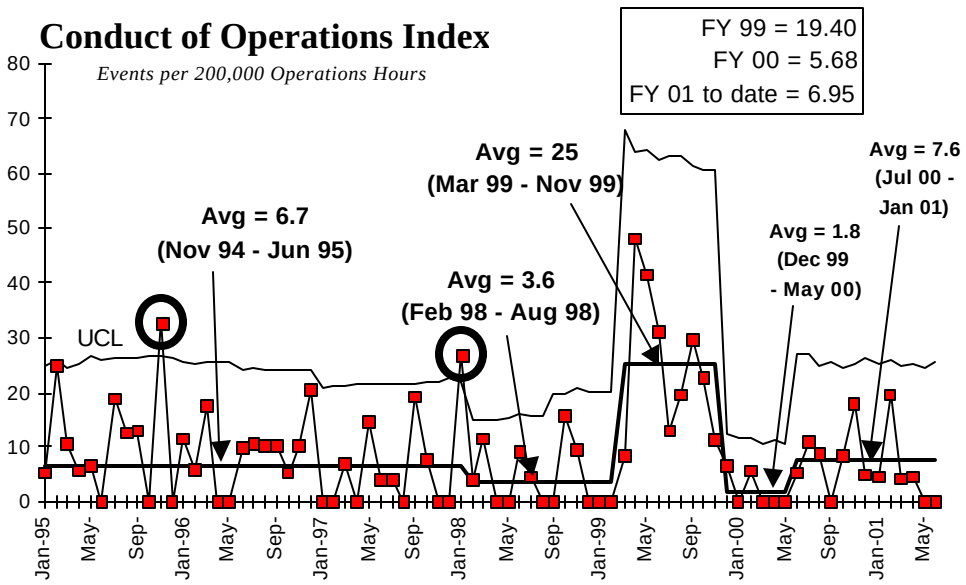
ISMS Status

SNF Project personnel continue to demonstrate a commitment to ISM in "Doing Work Safely." Several examples of this include:

- Implemented a priority system to accomplish work that focuses on corrective maintenance necessary to continue facility operation and preventive maintenance to support the facility authorization basis. Currently, Engineering, Planning, Work Control and Maintenance organizations are working to the same goals established by Facility Managers.
- Completed the second maintenance outage cycle by maintenance and operations personnel.
- Conducted a "Time Out for Safety" following the completion of the second maintenance outage.
- Achieved over 3 million safe work hours.

Conduct of Operations

Green



In an effort to raise the projects focus on worker safety and conduct of operations, a weekly review of lessons learned and occurrence reports is conducted at the opening of the SNF Project senior staff meeting. The project continues to emphasis worker safety and conduct of operations with all project personnel.

BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

Breakthroughs

Green

SNF Accelerated Closure Team (ACT) – Phase I of the SNF ACT has identified several prospective improvements and breakthroughs that have the potential to further reduce fuel removal processing times and accelerate the completion of the Project. BCRs were submitted for DOE approval on two of the ACT initiatives:

- Accelerated Sludge Capture and Removal Strategy
- Transition Deactivation Budget Reallocation

Other potential breakthroughs continue to be actively analyzed to reduce MCO drying requirements and to determine the thermal stability of alternate "wet" sludge storage alternatives.

MCO Production Rate Improvements – All equipment required to support and operate the manual process tables has been installed and tested. The new equipment is expected to be fully operational by August 1, 2001 and a reduction in the average processing time of up to 30 percent is expected. When this improvement is realized, MCO production capacity from K West Basin will be sufficient to meet all production requirements.

Opportunities for Improvement

None to report at this time.

UPCOMING ACTIVITIES

- Continue MCO shipments through FY 2001.
- Complete standard startup review for process modifications in K West Basin in July 2001.
- Initiate KW Basin spent nuclear fuel canister cleaning operations in August 2001.
- Initiate debris removal from dummy elevator pit and basin in August 2001.
- Facility Evaluation Board (FEB) here in August 2001.
- Complete Standard Startup Review for Shippingport SNF receipt and storage at CSB by September 2001.
- Receive all Shippingport Spent Fuel Canisters by September 2001.
- Approve Start of Construction for the K East and K West Basin facility modifications for Accelerated Fuel Transfer Strategy (AFTS) by September 2001.
- Issue revised transition plan for the Sludge Handling Project by September 2001.
- Initiate Shippingport fuel shipments to the CSB in November 2001.

MILESTONE ACHIEVEMENT

Yellow

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2001
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	0	0	1	0	0	0	0	1
DOE-HQ	0	0	0	0	0	0	0	0
RL	0	0	2	1	0	1	0	4
Total Project	0	0	3	1	0	1	0	5

Only TPA/EA milestones and all FY2001 overdue and forecast late milestones are addressed in this report. Milestones overdue are deleted from the Milestone Exception Report once they are completed. The following chart summarizes the FY2001 TPA/EA milestone achievement and a Milestone Exception Report follows. The last milestone table summarizes the first six months of FY 2002 TPA/EA milestones.

FY 2001 Tri-Party Agreement / EA Milestones

Number	Milestone Title	Status
M-34-16 (DOE-HQ Milestone No. S00-01-900)	**"Initiate Removal of K West Basin Spent Nuclear Fuel"**	**Due 11/30/00 –** Completed on December 7, 2000. Green
M-34-06-T01 (RL Milestone No. S04-99-521)	**"Initiate K West Basin Spent Nuclear Fuel Canister Cleaning Operations"**	**Due 12/31/00 –** Overdue. Forecast start, August 31, 2001. Completion of Canister cleaning operations is driven by the fuel removal schedule. No additional impacts projected. Yellow
M-34-26-T01 (DOE-HQ Milestone No. S15-02-002)	**"Approve Start of Construction for the K East and K West Basin facility modifications for AFTS"**	**Due 09/30/01 –** On Schedule. Green

DNFSB Commitments

	Nothing to report at this time.	

MILESTONE EXCEPTION REPORT

Number/WBS	Level	Milestone Title	Baseline Date	Forecast Date

Overdue – 1

S04-99-521 **RL** Start K West Canister Cleaning Operations 12/31/00 8/31/01
1.3.1
Cause: Suspended design last summer to simplify system and reduce costs. SNF Project made a project management decision to defer work to FY 2001 and focus on near-term critical path items.
Impact: No impact to any other SNF Project baseline schedule activities or TPA/DNFSB milestones.
Corrective Action: Currently in design and on schedule; to be started by August 31, 2001.

Forecast Late – 0

FY 2002 Tri-Party Agreement / EA Milestones

Number	Milestone Title	Status
M-34-29	**"Complete K East Basin and K West Basin facility modifications for AFTS cask transportation system"**	**Due 03/31/2002** On Schedule
M-34-12-T01 (S04-97-621)	**"Complete Construction of K East Basin Integrated Water Treatment System (IWTS) to Support Spent Nuclear Fuel Removal"**	**Due 09/30/2002** On Schedule

DNFSB Commitments

	Nothing to report at this time.	

PERFORMANCE OBJECTIVES

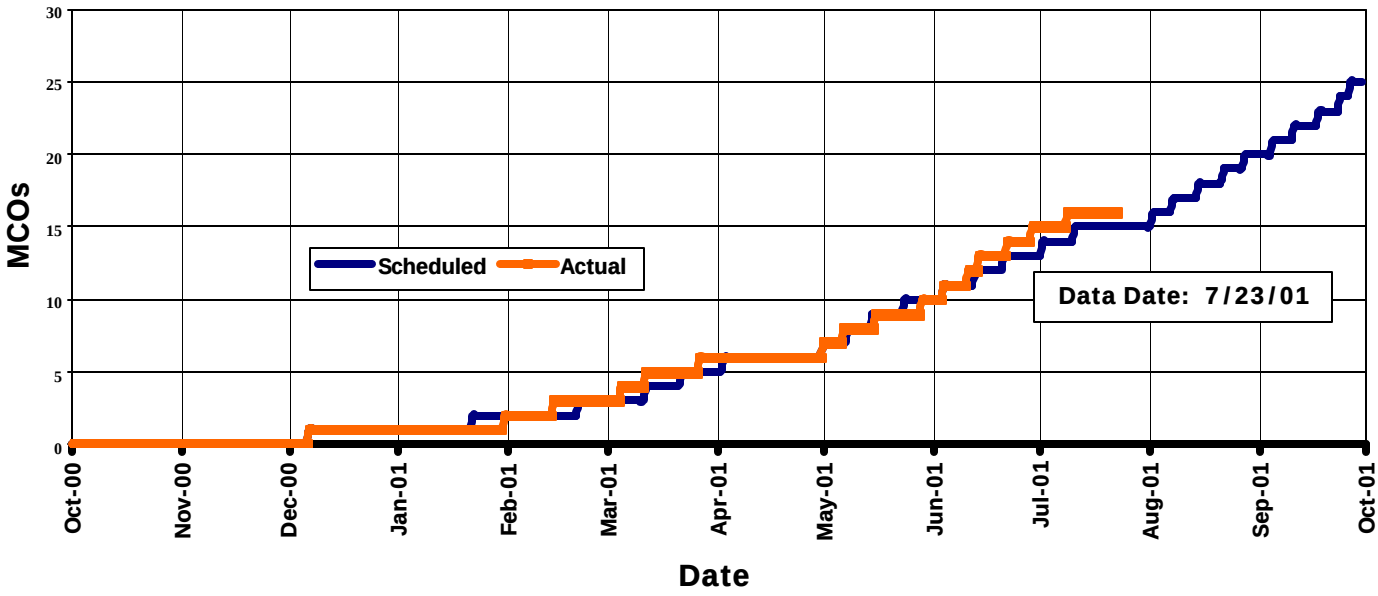
Move Fuel Away from the River

EXPECTATION: Remove spent fuel from K Basins
Move first MCO of SNF from KW Basin and transport to the CVD Facility for processing by December 7, 2000 (TPA M34-16)
Status: Completed on schedule.

Move 116 Metric Tons Heavy Metal from KW Basin by end of FY 2001
Status: Ten days ahead of schedule.

Complete construction on Fuel Transfer System (FTS) by March 30, 2002
Status: On schedule.

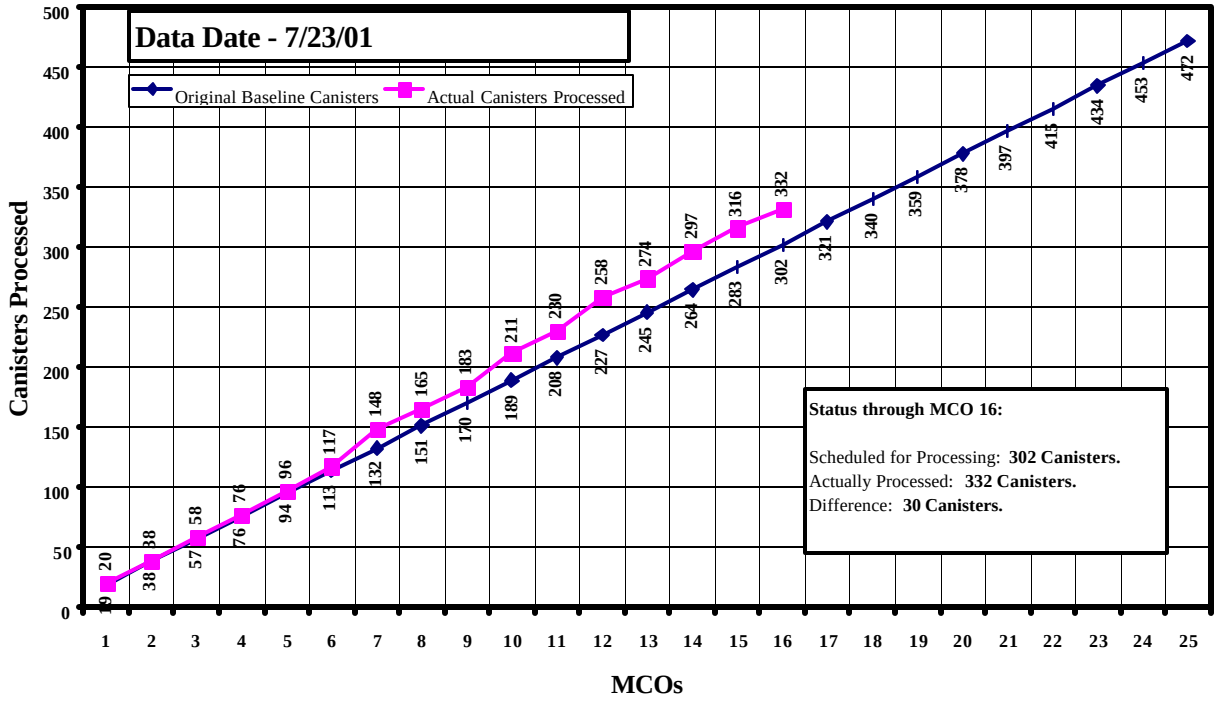
FY 2001 MCO Baseline Production Performance



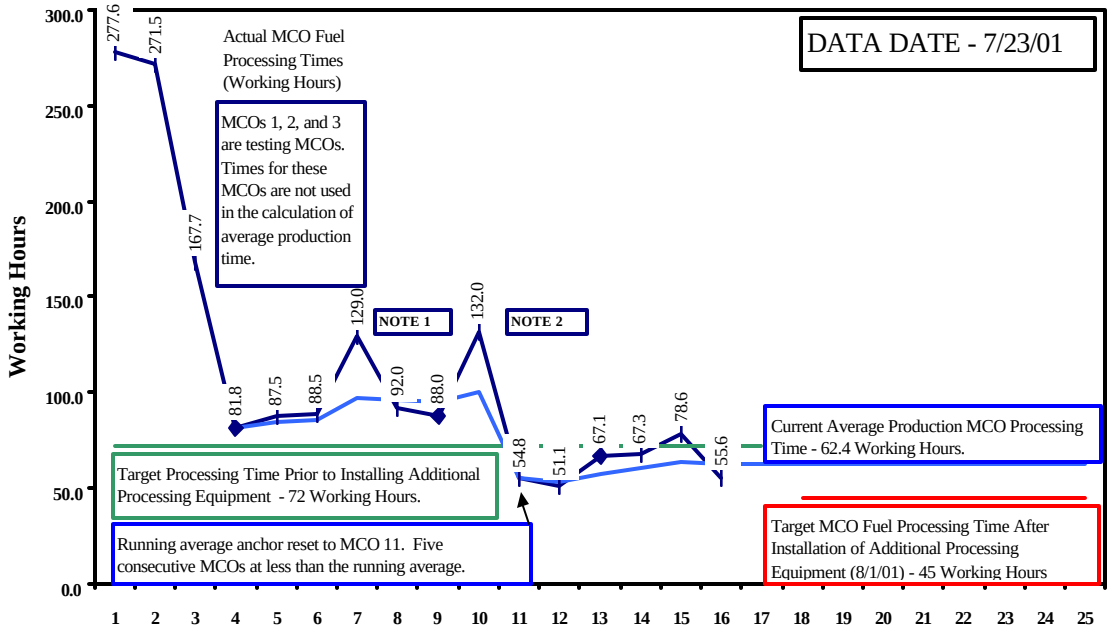
The fourteenth MCO was shipped to the CVD Facility from K West Basin on June 22, 2001. The eleventh MCO was shipped to the Canister Storage Building (CSB) on June 11, 2001, the twelfth MCO was shipped to the CSB on June 17, 2001, and the thirteenth MCO was shipped to the CSB on June 19, 2001. The fourteenth MCO is currently being processed at the CVD Facility.

PERFORMANCE OBJECTIVES (CONTINUED)

Actual versus Scheduled Canisters Processed

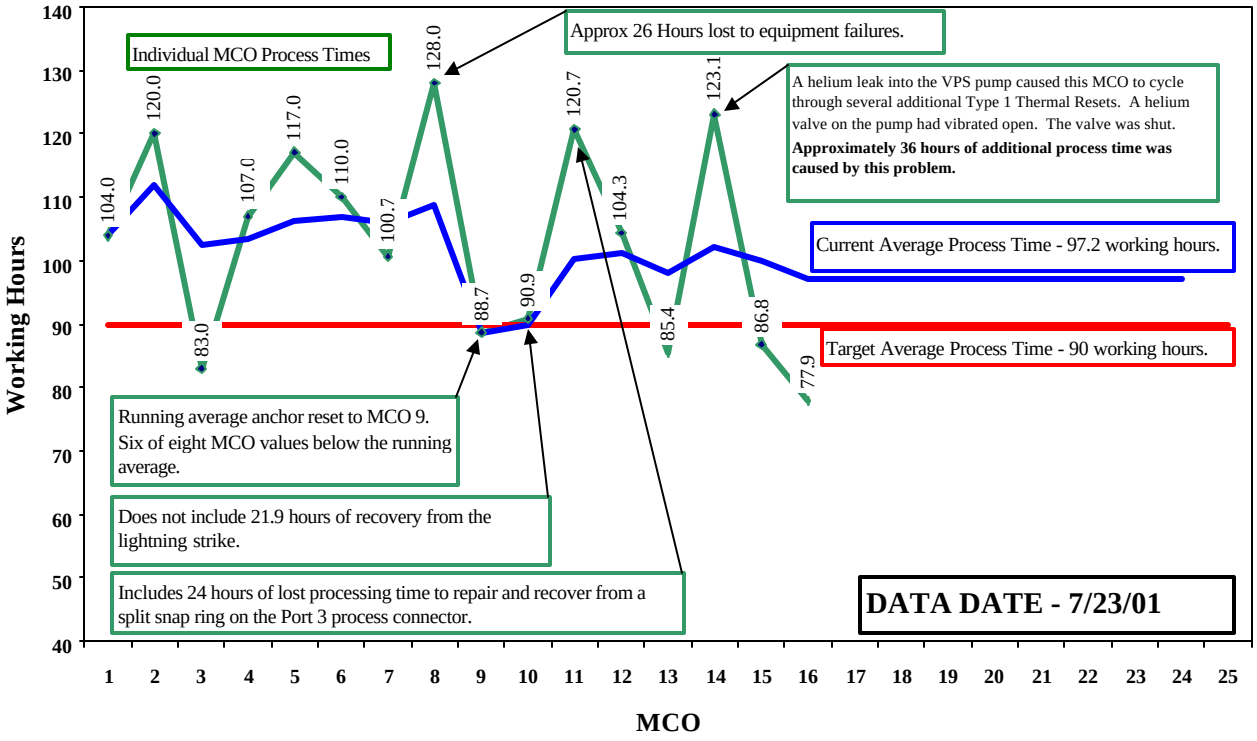


105K West MCO Fuel Processing Times

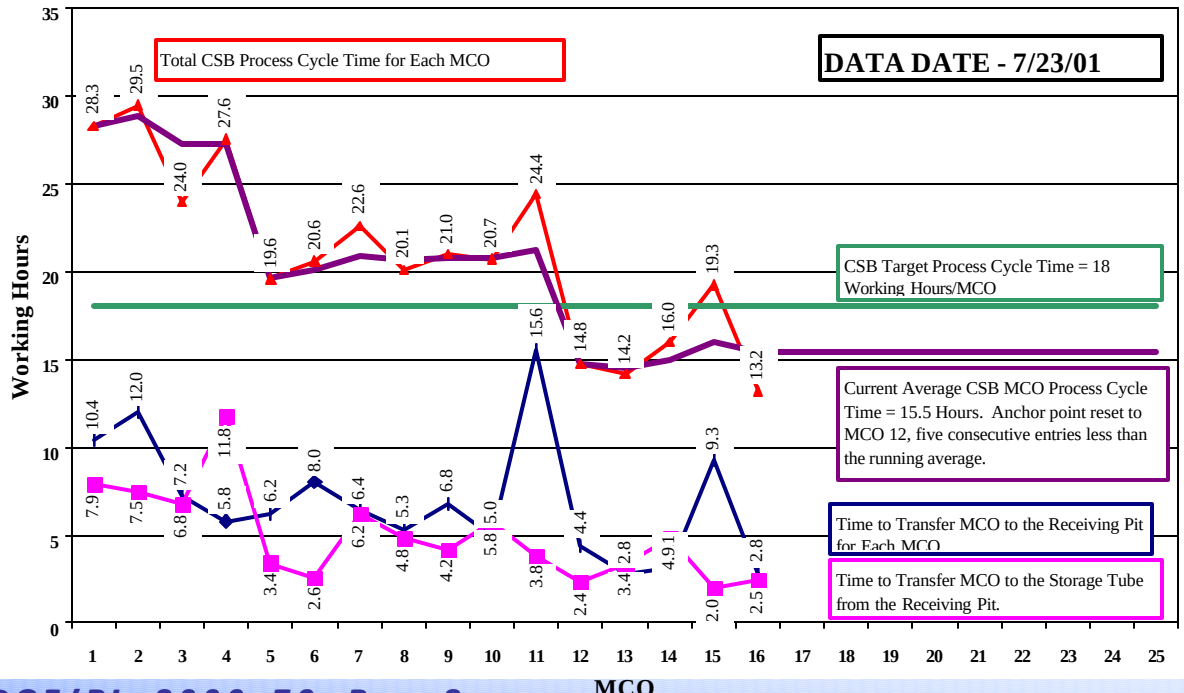


PERFORMANCE OBJECTIVES (CONTINUED)

CVDF MCO Processing Times



CSB MCO Process Cycle Times



FY 2001 Schedule / Cost Performance – All Fund Types Cumulative to Date Status – ($000)

Green

By PBS		FYTD BCWS	BCWP	ACWP	SV	%	CV	%	PEM	EAC
PBS WM01 WBS 1.3	Spent Nuclear Fuel Project	$ 129,600	$ 122,391	$ 121,752	$ (7,209)	-6%	$ 640	1%	$ 189,336	$ 186,400
	Total	$ 129,600	$ 122,391	$ 121,752	$ (7,209)	-6%	$ 640	1%	$ 189,336	$ 186,400

Authorized baseline as per the Integrated Planning Accountability, and Budget System (IPABS) – Project Execution Module (PEM).
Note: Above data includes RL contract for Steam.

FY to Date Schedule / Cost Performance

FYTD, SNFP is behind schedule. SNFP cost and schedule figures now reflect incorporation of the Accelerated Fuel Transfer Strategy (AFTS) baseline changes, which more accurately portrays current performance. The unfavorable schedule variance of $7.2 million (6 percent) was due to re-planning activities for Site Wide SNF, Deactivation and MCO Production.

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

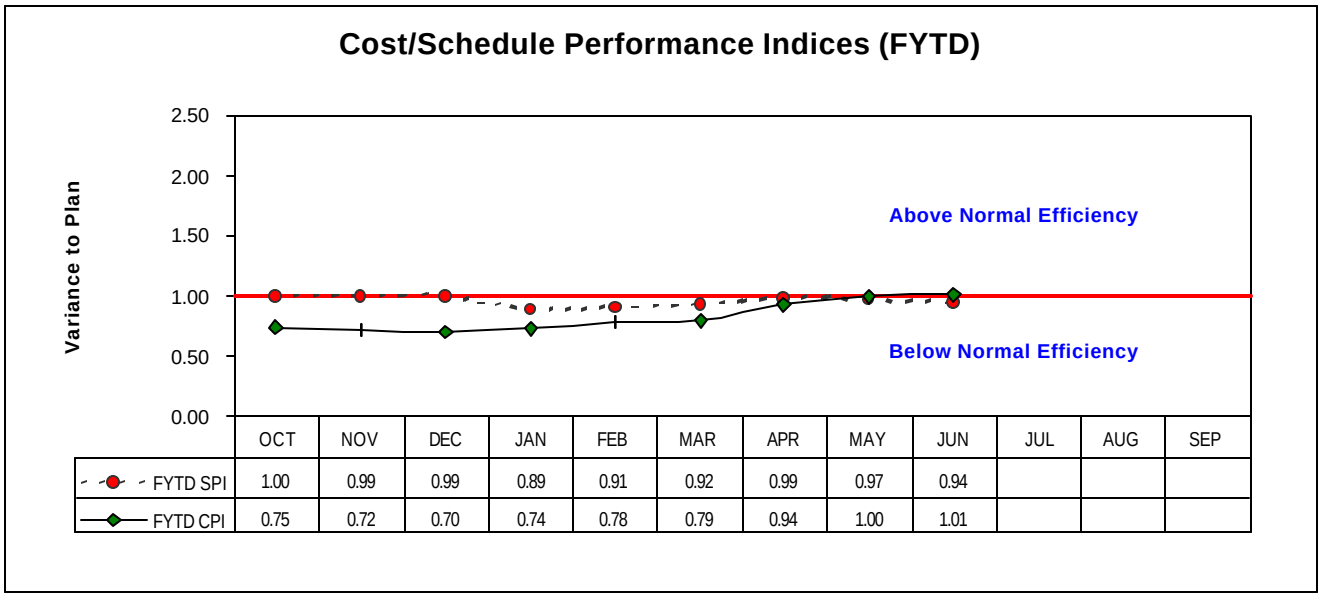
Schedule Variance Analysis: (-$7.2M)

Spent Nuclear Fuel Project — 1.3.1/WM01
Description /Cause: The unfavorable schedule variance is due to re-planning activities for Site Wide SNF, Deactivation and MCO production.
Impact: None to report.
Corrective Action: Baseline Change Requests are in process.

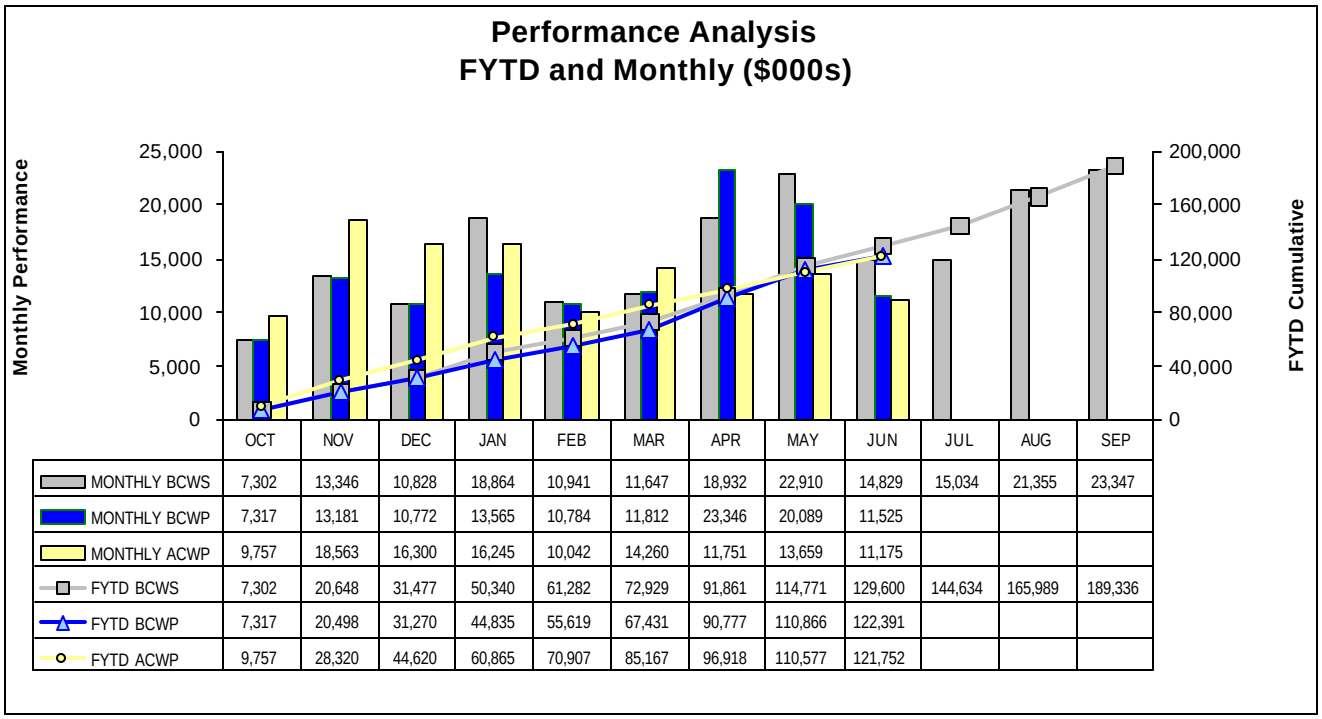
Cost Variance Analysis: (+$0.6M)

Spent Nuclear Fuel Project — 1.3.1/WM01
Description/Cause: The favorable cost variance is due to under runs in the Infrastructure support account and positive passbacks.
Impact: None to report.
Corrective Action: None required.

Cost/Schedule Performance (Monthly and FYTD)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
FYTD SPI	1.00	0.99	0.99	0.89	0.91	0.92	0.99	0.97	0.94			
FYTD CPI	0.75	0.72	0.70	0.74	0.78	0.79	0.94	1.00	1.01			



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY BCWS	7,302	13,346	10,828	18,864	10,941	11,647	18,932	22,910	14,829	15,034	21,355	23,347
MONTHLY BCWP	7,317	13,181	10,772	13,565	10,784	11,812	23,346	20,089	11,525			
MONTHLY ACWP	9,757	18,563	16,300	16,245	10,042	14,260	11,751	13,659	11,175			
FYTD BCWS	7,302	20,648	31,477	50,340	61,282	72,929	91,861	114,771	129,600	144,634	165,989	189,336
FYTD BCWP	7,317	20,498	31,270	44,835	55,619	67,431	90,777	110,866	122,391			
FYTD ACWP	9,757	28,320	44,620	60,865	70,907	85,167	96,918	110,577	121,752			

FUNDS MANAGEMENT
FUNDS VS SPENDING FORECAST ($000)
FY 2001 TO DATE

	Funds	FYSF	Variance
1.3 Spent Nuclear Fuel			
WM01			
Project Completion - Operating	**$ 196,462**	**$ 176,825**	**$ 19,637**
- Line Item	**$ -**	**$ -**	**0**
Total	**$ 196,462**	**$ 176,825**	**$ 19,637**

[Status through July 2001]

The Funding Variance will be carried over to FY2002 to fund the Sludge Water System (SWS) and MCO shipments.

ISSUES

Regulatory Issues

Issue: Notice of Construction (NOC) reviews by Washington Department of Health (WDOH) are dependent on good working relations and proactive information sharing. The request for turn around allows only about 60 days versus 90 days.

Impacts: Interim Milestone due September 30, 2001 could be late by up to 30 days. No impact on March 30, 2002 milestone.

Corrective Action: NOCs submitted to RL and informally to WDOH. Joint meeting (RL, FH and WDOH) and discussion scheduled for July 24, 2001. Preliminary discussions have already been held between FH and WDOH with RL concurrence.

Technical, External and DOE Issues and DOE Requests

None to report.

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

PROJECT CHANGE NUMBER	DATE ORIGIN.	BCR TITLE	FY01 COST IMPACT $000	SCH	TECH	DATE TO FH RMB	RMB APR'VD	RL APR'VD	CURRENT STATUS
SNF-2001-014	04/20/2001	CSB Weld Station Acceleration	174	Y	Y	06/05/2001	06/14/2001		RL comments to be addressed. BCR in revision. AWA in process.
SNF-2001-016	04/30/2001	Accelerated Sludge Capture and Removal Strategy	-6840	Y	Y	07/09/2001	07/16/2001		To RL for review/approval 7/17/01.
SNF-2001-023	06/09/2001	K Basins Deactivation Acceleration	N	Y	N	07/09/2001	07/16/2001		To RL for review/approval 7/17/01.
ADVANCE WORK AUTHORIZATIONS									
None									

KEY INTEGRATION ACTIVITIES

- SNF final disposition interface activities are ongoing with the National SNF Program, including Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance (QA) Program implementation. OCRWM QA Program Plan Audit is on-going by the National SNF Program.

- The SNF Project and Waste Management Project continued preparations for Shippingport (PA) Pressurized Water Reactor Core 2 SNF removal. The third and fourth Shippingport Spent Fuel Canisters were received.

- The SNF Project and the River Corridor Project continued to interface on 324 Building (B Cell) SNF removal.

- Neutron Radiography Facility Training Research along with Isotope Production General Atomics (TRIGA) and Fast Flux Test Facility (FFTF) SNF relocation planning is ongoing with the FFTF Project.

- Activities continued for potential receipt of SNF that may be discovered by Bechtel Hanford Inc. during upcoming 105F and 105H reactor basins deactivation at K Basins.

- The Sludge Handling Project and T Plant Operations continued preparations for K Basin sludge storage at T Plant.